

Serial No.: 10/777,147
Docket No.: 102-1010
Amendment dated November 17, 2005
Reply to the Office Action of August 17, 2005

REMARKS

Introduction

In accordance with the foregoing, the specification has been amended. Claims 1-27 are pending in this application.

Applicants note with appreciation the Examiner's indication that each of the references cited in the Information Disclosure Statements filed February 13, 2004 have been considered.

Objection to the Specification

The disclosure has been rejected for minor informality. Appropriate correction has been made. Therefore, Applicant respectfully requests withdrawal of this objection.

Rejection under 35 USC §103

Claims 1-6, 11-16, 21 and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,845,177 to Choi (hereinafter "Choi") in view of U.S. Patent No. 6,571,060 to Moriya et al. (hereinafter "Moriya"). Claims 7-10 and 17-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Choi and Moriya and further in view of U.S. Patent No. 6,381,432 to Hattori (hereinafter "Hattori"). Claims 23-27 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Hattori in view of Moriya. This rejection is respectfully traversed for at least the reasons stated below.

The Examiner relies on the Moriya in the rejection of claims 1-27. Applicant respectfully traverses this rejection on at least the grounds the Moriya is non-analogous to Applicant's claimed invention.

In order for a reference to be considered analogous art to be relied on as a basis for rejection of an applicant's invention under 35 U.S.C. § 103, "the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem

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with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992); MPEP § 2141.01(a).

It is respectfully submitted that Moriya is a reference outside the field of the inventor's endeavor. Regarding the inventor's field of endeavor, applicant's claimed invention of claims 1-27 is directed to an apparatus to drive a roller used in an electrophotographic printer. See "Field of the Invention," pg. 1, ¶ 2 of the Specification. In contrast, Moriya is directed to "a driving mechanism employed in an optical device such as a still camera or a video camera." See "Field of the Invention," col. 1, lines 15-17. The driving apparatus of Applicant's invention drives rollers, such as a charging roller, according to a rotation of a photoconductive drum. The driving mechanism of Moriya refers to a lens driving mechanism or a focusing mechanism of a camera. See col. 2 lines 43-47. It is respectfully submitted that a person of ordinary skill, seeking to solve a problem in driving rollers in an electrophotographic printer, would not reasonably be expected or motivated to look to driving mechanisms for lenses of a camera, and therefore, Moriya is not within the field of Applicant's endeavor. See *In re Oetiker* (holding that fasteners for garments were not in the same field of endeavor as fasteners for a hose clamp because it was not shown that a person of ordinary skill, seeking to solve a problem in fastening a hose clamp, would reasonably be expected and motivated to look to fasteners for garments).

Since, as detailed above, Moriya is not in the field of the inventor's endeavor, Moriya cannot be considered analogous to Applicant's invention unless Moriya is reasonably pertinent to the particular problem with which the inventor was concerned. The problems with which Applicant was concerned include at least one of reducing impulse and velocity variation on a roller rotated by a photoconductive drum and reducing variations on inter-axis distance between a roller rotated by a photoconductive drum and the photoconductive drum to prevent image quality of images from deteriorating.

Moriya is concerned with the problem of reducing noise in a driving mechanism of an optical device. See col. 1 lines 30-47. "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in

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considering his problem. Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve. If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection. An inventor may well have been motivated to consider the reference when making his invention. If it is directed to a different purpose, the inventor would accordingly have had less motivation to consider it." *In re Clay*.

Moriya states an object of reducing noise generated at a gear meshing portion of a driving mechanism of an optical device. Although FIGS. 4-6 of Moriya illustrate test results for noise reduction of the driving mechanism, and FIG. 4 of Moriya also illustrates test results for a sensory evaluation of noise reduction and durability of gears of the driving mechanism, the test results in FIGS. 4-6 of Moriya do not include any measurements of impulse or velocity variation. In fact, at no point does Moriya teach or suggest reducing impulse and velocity variation on the gears of the driving mechanism. Further, the test results in FIGS. 4-6 of Moriya do not include any measurements of variations of inter-axis distance between rollers, because Moriya does not teach or suggest the use of any rollers in the driving mechanism.

In the Office Action, the Examiner alleges that a person with ordinary skill would have been motivated to consider Moriya "for at least the purpose of reducing noise caused by the gears." However, Applicant's invention was not directed to reducing noise in gears of the driving apparatus, but to reducing impulse and velocity variation of a roller rotated by the photoconductive drum and reducing variations of inter-axis distance between the roller and the photoconductive drum. As described above, Moriya is not concerned at all with reducing impulse and velocity variation of rollers or reducing variations of inter-axis distance between rollers. Accordingly, Moriya is not reasonably pertinent to the particular problem with which Applicant's invention is concerned.

In view of the above, it is respectfully submitted that Moriya is non-analogous to Applicant's invention as claimed in claims 1-27. Therefore, Moriya cannot properly be used as a basis for a rejection under 35 U.S.C. § 103. For at least this reason, withdrawal of the rejection of claims 1-27 and allowance of these claims are earnestly solicited.

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Furthermore, Moriya does not teach or suggest the application of the driving mechanism to the electrophotographic printer of Choi or to the laser beam printer of Hattori. Also, neither Choi nor Hattori teach or suggest any benefits of reducing noise in their respective printers. Accordingly, neither Choi, Hattori, nor Moriya teach or suggest Applicant's invention as claimed in claims 1-27, and there is no motivation to combine Choi or Hattori with Moriya. Therefore, it is respectfully submitted that Applicant's invention as claimed in claims 1-27 are additionally allowable over Choi, Hattori, and Moriya separately or in any hypothetical combination thereof. For at least this reason, withdrawal of claims 1-27 and allowance of these claims are earnestly solicited.

Conclusion

There being not other objections or rejections, it is submitted that the application is in a condition of allowance, and an early action to this effect is courteously solicited.

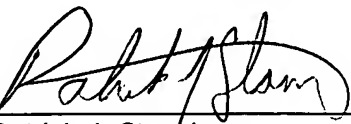
No Fee has been incurred. However, if any further fees are required in connection with the filing of this Amendment, please charge the same to our deposit account number 502827.

Should any questions remain unresolved, the Examiner is respectfully requested to telephone Applicant's attorney.

Respectfully submitted,

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